

PATENT SPECIFICATION

1,166,219

DRAWINGS ATTACHED.

Date of Application (No. 17120/68) and filing Complete Specification: 10 April, 1968.

Application made in Sweden (No. 5198) on 14 April, 1967.

Complete Specification Published: 8 Oct., 1969.

1,166,219



Index at acceptance:—F2 H(A2E1B, A2E2A, A2E6).

International Classification:—B 62 d 53/02.

COMPLETE SPECIFICATION.

Improvements in or relating to Articulated Vehicles.

We, AKTIEBOLAGET FARMING, a corporation organized and existing under the laws of Sweden, of 1 Bathamnsvagen, Nykoping, Sweden, do hereby declare the invention, for which we pray that a patent may be granted

two wheels thereon. However, either of the axles 4, 5 may, alternatively, be provided with one or more bogies with driven wheels. Steering of the vehicle is brought about by pivoting one of the axles.

ERRATUM

SPECIFICATION NO. 1,166,219

Page 1, Index at acceptance:— for "F2 H" read "B7 H"

THE PATENT OFFICE,
27 November 1969

D 120236/14

20 centre of gravity of each lying in vertical planes containing on one hand the axis of the shaft, and on the other hand the axis of the wheel axle of the respective vehicle part. This gives the vehicle an improved stability and, at the same time, the coupling between the two vehicle parts is subjected to a minimum of load.

25 An embodiment of the invention will now be described, by way of example, with reference to the accompanying drawing, which illustrates in perspective view a vehicle according to the present invention.

30 The vehicle comprises two parts on which the vehicle wheels, not shown, are mounted and which are represented by frames 1 and 2. The frames 1 and 2 are rotatably connected by a shaft 3 which extends longitudinally of the vehicle and which is horizontal when the vehicle is on level ground.

40 Preferably, all the ground wheels of the vehicle are driven and are disposed on axles 4 and 5 respectively on the frame 1 and the frame 2. Each of the wheel axles 4 and 5 has

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represented by the frames 1 and 2 lie in vertical planes containing on one hand the axis of the shaft 3 and on the other hand the axis of wheel axle 4 and 5, respectively, of the associated vehicle frame. Each centre of gravity thus lies on a vertical line drawn through a point of intersection of the axis of the shaft 3 and the axis of the wheel axle 4 and 5, respectively.

60 The improved stability is realised by this symmetrical relationship. Should, for example, the frame 2 carry a load, the latter is positioned so that its centre of gravity also lies on said vertical line.

70 Certain aspects of the embodiment described above form the subject of the invention claimed in our co-pending application No. 17119/68.

WHAT WE CLAIM IS:—

1. A vehicle comprising two parts each having an axle for ground wheels and being rotatably connected by a shaft which extends longitudinally of the vehicle, and

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COMPLETE SPECIFICATION.

Improvements in or relating to Articulated Vehicles.

We, AKTIEBOLAGET FARMING, a corporation organized and existing under the laws of Sweden, of 1 Bathamnsvagen, Nyköping, Sweden, do hereby declare the invention, for which we pray that a patent may be granted to us, and the method by which it is to be performed, to be particularly described in and by the following statement:—

This invention relates to a vehicle having two parts each having an axle for ground wheels and being relatively rotatably connected by a shaft which extends longitudinally of the vehicle.

According to the present invention we provide a vehicle comprising two parts each having an axle for ground wheels and being rotatably connected by a shaft which extends longitudinally of the vehicle, and having the centre of gravity of each lying in vertical planes containing on one hand the axis of the shaft, and on the other hand the axis of the wheel axle of the respective vehicle part.

This gives the vehicle an improved stability and, at the same time, the coupling between the two vehicle parts is subjected to a minimum of load.

An embodiment of the invention will now be described, by way of example, with reference to the accompanying drawing, which illustrates in perspective view a vehicle according to the present invention.

The vehicle comprises two parts on which the vehicle wheels, not shown, are mounted and which are represented by frames 1 and 2. The frames 1 and 2 are rotatably connected by a shaft 3 which extends longitudinally of the vehicle and which is horizontal when the vehicle is on level ground.

Preferably, all the ground wheels of the vehicle are driven and are disposed on axles 4 and 5 respectively on the frame 1 and the frame 2. Each of the wheel axles 4 and 5 has

two wheels thereon. However, either of the axles 4, 5 may, alternatively, be provided with one or more bogies with driven wheels.

Steering of the vehicle is brought about by pivoting one of the vehicle frames in relation to the other. To this end the frames 1 and 2 are pivotally connected at at least one fulcrum 6.

A locking mechanism 7 serves to interlock the frames 1 and 2 in different angular positions. The locking mechanism 7 comprises a disc segment 8 fixedly arranged on the frame 1, and a clamping device 9 fixedly arranged on the frame 2, said clamping device being adapted to clamp the disc segment 8 under the action of a pressure medium supplied through a line 11 to effect said interlocking.

The centres of gravity of the two parts represented by the frames 1 and 2 lie in vertical planes containing on one hand the axis of the shaft 3 and on the other hand the axis of wheel axle 4 and 5, respectively, of the associated vehicle frame. Each centre of gravity thus lies on a vertical line drawn through a point of intersection of the axis of the shaft 3 and the axis of the wheel axle 4 and 5, respectively.

The improved stability is realised by this symmetrical relationship. Should, for example, the frame 2 carry a load, the latter is positioned so that its centre of gravity also lies on said vertical line.

Certain aspects of the embodiment described above form the subject of the invention claimed in our co-pending application No. 17119/68.

WHAT WE CLAIM IS:—

1. A vehicle comprising two parts each having an axle for ground wheels and being rotatably connected by a shaft which extends longitudinally of the vehicle, and

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5 having the centre of gravity of each lying in vertical planes containing on one hand the axis of the shaft and on the other hand the axis of the wheel axle of the respective vehicle part.

2. A vehicle comprising two parts each having an axle for ground wheels and being rotatably connected by a shaft which extends longitudinally of the vehicle, substantially as

hereinbefore described with reference to the accompanying drawing. 10

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COMPLETE SPECIFICATION

1 SHEET

*This drawing is a reproduction of
the Original on a reduced scale*

